

1. A lamp monitoring and control system for monitoring and controlling at least one lamp, comprising:

at least one lamp monitoring and control unit, coupled to a respective lamp of the at least one lamp monitor and control and generate monitoring data; and

a transmitter, configured to transmit the monitoring data by wireless communication to a base station for processing.

2. The system of claim 1, further comprising at least one base station, wirelessly coupled to the at least one lamp monitoring and control unit to receive the monitoring data, wherein each of the at least one base station includes a data processing unit configured to process the transmitted monitoring data.

3. The system of claim 1, wherein the monitoring data comprises at least an ID field and a status field.

4. The system of claim 3, wherein the ID field includes a lamp monitoring and control unit ID.

5. The system of claim 1, wherein the monitoring data includes current data related to the respective lamp.

6. The system of claim 5, wherein the monitoring data includes voltage data related to the respective lamp.

7. The system of claim 1, wherein the at least one of the at least one lamp monitoring and control units transmits the monitoring data to at least one of the at least one base station using an RF link.

8. The system of claim 1, wherein transmission of the monitoring data from the at least one lamp monitoring and control unit is staggered in time to avoid a collision with transmission of monitoring data from a second lamp monitoring and control unit.

9. The system of claim 1, wherein the transmission of the monitoring data from the at least one lamp monitoring and control unit is staggered in frequency to avoid a collision with transmission of monitoring data from a second lamp monitoring and control unit.

10. A method for monitoring a status of at least one lamp on a lamp pole, comprising:  
collecting monitoring data for the at least one lamp using a monitoring and control device located substantially near a top of a lamp pole; and  
wirelessly transmitting a monitoring data to at least one random time to a prescribed receiver.

11. The method of claim 10, further comprising receiving the monitoring data by the receiver and processing the monitoring data by the receiver, wherein the receiver is configured to receive monitoring data from at least two monitoring and control devices.

12. The method of claim 11, wherein the at least two monitoring and control devices are not co-located.

13. The method of claim 10, wherein transmitting comprises:  
randomizing a transmission start delay time;  
further randomizing a transmission delta time; and  
redundantly transmitting the monitoring data in accordance with the transmission start delay time and the transmission delta time.